PROCEEDINGS OF THE
ROYAL ENTOMOLOGICAL SOCIETY
OF LONDON

SERIES C. JOURNAL OF MEETINGS

VOLUME 18. No. 10, 1953.

ORDINARY MEETING.

WEDNESDAY, 20TH JANUARY, 1954, at 5.30 p.m.

AGENDA

1. Confirmation of the Proceedings of the Ordinary Meeting held on 2nd December, 1953.
2. Recommendations of candidates for Fellowship. First reading.
3. Recommendations of candidates for Fellowship. Second reading.
4. Announcement of election of new Fellows.
5. Additions to the Library. [See p. 58.]
6. Nomination of Officers and Council for 1954.
7. Admission of Fellows.
8. Exhibits.

Fellows are particularly requested to bring suitable exhibits to the Meeting even though it may not be possible to announce their intention to do so beforehand.

Note.—To avoid congestion in the Library and to enable exhibits to be displayed to greater advantage, a table has been placed in the meeting-room for this purpose. Fellows are asked to place their exhibits on this table with a suitable explanatory note, as soon as possible on the afternoon of the meeting, so that they are available for inspection there before the meeting opens.

9. Communications.

1. Dr. Hugh Scott, F.R.S.

Observations on honey-bees in Eritrea and Northern Ethiopia.

[ABSTRACT]

Slides will be shown illustrating the types of beehives used in these countries; also the collection by bees of certain substances on sale in an open market, apparently as an addition to their normal supplies of pollen. These observations were made between October, 1952, and January, 1953.

2. Professor V. B. Wigglesworth, C.B.E., F.R.S.

Growth and movement in the tracheal system.

[ABSTRACT]

The structure, growth and moulting of the tracheae supplying the epidermis in *Rhodnius* will be described. The tracheoles do not shed their cuticular linings but persist unchanged from one instar to the next. The tracheoles are not inert structures: they migrate actively towards regions where the oxygen supply is deficient, drawing the tracheae after them. This migration provides for the immediate oxygen supply of implanted organs. It is followed by an active outgrowth of new tracheae and tracheoles which become functional at moulting. If the insect is reared in reduced concentrations of oxygen extra tracheae are produced. This happens in the wing lobes. The consequent effects on wing venation will be discussed.

TEA will be served in the Library before the meeting.

Serial Publications in the Library of the Royal Entomological Society of London.

A list of the serial publications in the Society's Library, with the titles abbreviated in accordance with the *World List of Scientific Periodicals*, has now been prepared. Copies may be obtained in the Society's office, price (to Fellows) 3*s*. 9*d*.

PROCEEDINGS OF THE ORDINARY MEETING HELD ON 2ND DECEMBER, 1953.

Professor P. A. Buxton, C.M.G., F.R.S., President, in the Chair.

Present: 83 Fellows and 15 Visitors.

The minutes of the Ordinary Meeting held on 4th November were confirmed and signed by the President.

Before the meeting formally opened the President asked Professor O. W. Richards to accept the Society's congratulations on his appointment to the Chair of Zoology and Applied Entomology at the Imperial College of Science.

The President said Council had given further consideration to the request of the Ministry of Agriculture's Working Party for evidence of the possible effects on wild life of toxic chemicals used in agriculture. As a result it had been decided to submit a short statement in general terms pointing out that the problem was one of considerable complexity for, while information was available in specific cases, little was known of the possible ultimate effects on the balance of the insect fauna.

Fellows having evidence relating to the problem were invited to send it to the Secretary.

The names of the following candidates for election were read for the first time: Mr. John Robert Chiswell, B.Sc.; Mr. Cecil Paul Friedlander, B.Sc., A.R.C.S.; Mr. Colin Alec Hobday; Miss Dora Ilse, Ph.D., Dr. Cecil George Johnson; Mr. Daniel Wilfred Rorke, Jr.; Mr. John Peter Thomas Boorman, B.A.

For the second time (taken as read): Mr. John A'Brook; Mr. Peter Belton; Mr. John Arthur Bullock; Mr. Dhamo Kessowdas Butani; Mr. James Edwards, B.Sc.; Professor Teiso Esaki; Mr. John Clifford Felton; Mr. Brian George Gardiner; Mr. Philip Earle Glover, M.B.E., D.Sc.; Mr. Reginald Derek Goodhue; Mr. Brian Hyde-Wyatt; Mr. Frank Moriarty; Mr. John Newton, B.Sc.; Mr. John Lambert Newton, M.R.C.S., L.R.C.P.; Mr. Peter Frank Prevett, B.Sc., A.R.C.S.; Professor Charles Frederick Morris Saint, C.B.E., F.R.C.S.; Mr. David John Stanbury; Mr. John Harold Stevenson; Mr. Malur Venkatrao Venkatesh, M.Sc.; Miss Marianne Elizabeth Versteegh; Mr. Shamsuddin Abdul Wahed, M.Ag.

The Secretary read the names of the following newly elected Fellows of the Society: Mr. T. N. Ananthakrishnan, B.Sc., Lecturer in Zoology, Loyola College, Madras 6, S. India; Mr. Cedric Alex Collingwood, B.Sc., Ashton under Hill, Evesham, Worcs.; Mr. Ahmad Said Kahn Ghouri, B.Sc., MacDonald College, St. Anne de Belleville, Quebec, Canada; Squadron-Leader Arthur Ganderton Harrison, F.R.S.A., Rilla Mill, Callington, Cornwall; Mr. George R. Hawthorne, Agricultural Education Department, 22, The Forbury, Reading Berks.; Mr. Edmund Neville Hey, 1025, Oxford Road, Reading, Berks.; Mr. N. Gopala Kurup, M.A., B.Sc., Varikolil Bungalow, Pandalam P.O., Travancore-Cochin State, S. India; Dr. John C. Martin, B.A., Dominion Parasite Laboratory, Box 179, Belleville, Ontario, Canada; Major Stanley McCullagh, Woodside House, Felmersham, Beds.; Mr. Akhauri Ramakant Prasad, B.Sc., c/o Mr. J. Prasad, O.S., M. Telbigha, P.O. & Dist, Gaya, Bihar, India; Mr. Vedula Venkat Rao, W. H. Organization, Malaria Unit, Lashio, Upper Burma; Mr. James H. Savage, West of Scotland Agricultural College, 6, Blythswood Square, Glasgow; Dr. Arthur Clement Justin Weerekoon, B.Sc., Lecturer in Zoology, Ceylon University, Colombo, Ceylon; Mr. Clive Julian Shiff, Department of Zoology and Entomology, Rhodes University, Grahamstown, South Africa; Mr. Athar Ali Siddiqi, Louisiana State University, P.O. Box 8165, Baton Rouge, La., U.S.A.; Mr. Courtenay Neville Smithers, B.Sc., Department of Entomology, Rhodes University, Grahamstown, South Africa; Mr. Kenneth Ivan Squires, 174, Broadway, Walsall, Staffs.

Thanks were voted to donors of gifts to the Library since the last meeting.

Mr. M. V. Brian, Mr. F. Dad Khan, Miss S. A. El-Ziady, Mr. K. P. Lamb and Mr. M. G. White signed the Obligation Book and were admitted Fellows of the Society.

The Secretary read for the first time the following names of Fellows nominated by Council to serve as Officers and Council for 1954: *President.*—Professor P. A. Buxton, C.M.G., F.R.S. *Treasurer.*—Dr. N. E. Hickin. *Secretary.*—Mr. E. B. Britton, M.Sc. *Editor.*—Mr. J. Balfour-Browne, M.A.

Other Members of Council.—Dr. C. H. Andrewes, F.R.S.; Dr. J. W. L. Beament; Mr. R. F. Bretherton, C.B.; Miss T. Clay, B.Sc.; Miss R. M. Davenport; Dr. G. H. L. Dicker; Mr. A. E. Gardner; Dr. W. J. Hall, C.M.G., M.C.; Mr. W. D. Hincks, M.Sc.; Mr. R. W. Lloyd; Dr. K. Mellanby, C.B.E., M.A.; Professor O. W. Richards, M.A., D.Sc.; Mr. F. T. Vallins.

Alternative nominations, supported by four properly qualified Fellows of the Society, should reach the Secretary before the meeting to be held on 20th January.

Dr. P. S. Corbet demonstrated and described some of the methods which have been used to make quantitative studies of dragonfly ecology. Three aspects of this were considered: larval life, emergence and adult life.

The direction and extent of movements in the larval stage were investigated by attaching external marks to the legs in the final instar. These were of three kinds: cellulose paint, fine copper wire and bands of coloured tin foil. The tin foil was obtained by cutting milk-bottle tops into narrow strips. Recaptures were obtained both from aquatic samples and from the exuviae which remained *in situ* after emergence of the adults.

Information concerning the time-distribution of adult emergence is of the greatest significance in a study of seasonal regulation. For large species, emerging at night, an accurate measure of emergence can be obtained by making daily collections of exuviae from the emergence supports. For small species, emerging by day and choosing cryptic sites for transformation, the emergence rate is perhaps best studied by using capture-recapture methods. These can provide an index of the rate at which adults return to the aquatic habitat after the maturation period. For such studies adult dragonflies can be marked with cellulose paint on the thorax, wings and abdomen.

Substantial mortality (attaining an annual value of 3 per cent. in some populations) may result from bird predation after emergence. After collecting a settled dragonfly, a bird pecks off its wings at a predetermined " anvil." By making daily collections of dismembered wings from local anvils, a minimum estimate of bird predation can be obtained. The accuracy of this method can be increased by using the convex and concave tracheation to identify right and left, fore and hind wings.

Estimates of adult longevity (especially amongst the Zygoptera) can be derived from recaptures of marked specimens.

Short reference was made to the method of determining by inspection whether or not a female dragonfly has previously mated. This involves looking at the postero-dorsal surface of the compound eyes for the impressions made by the male claspers during copulation. An interesting extension of this method is to trace the incidence of homosexuality amongst male dragonflies.

Specimens were exhibited which demonstrated the practical use of these methods.

Mr. H. Oldroyd exhibited a collection of Seaweed Flies (Diptera : Coelopidae), a large proportion being *Coelopa frigida* Fabr. He said these flies are normally present throught the year on most of the coasts of the temperate and subarctic regions of both hemispheres. This autumn they have been unusually numerous on the south coast of England, and for the first time have appeared in numbers far inland, chiefly in the London area.

The problem on the coast is merely an aggravation of the normal condition, apparently brought about by the coincidence of large amounts of the stranded and decaying seaweed in which the flies breed, and an unusually mild autumn.

The most obvious remedy is to remove the rotting seaweed, but the authorities concerned have preferred spraying and trench-digging. Even if no action were taken the flies would probably have ceased to be a nuisance when colder weather reduced the activity of the adults.

In London the flies have been attracted into premises where certain organic solvents—notably trichlorethylene and chloroform—are used. This is a well-known characteristic of *C. frigida*, and perhaps of some of the other species. They appeared suddenly and in large numbers in west-central districts, and later spread to the north-east, and east to Rochester. They were also reported from East Grinstead. In view of the very large numbers on the south coast, and the prevalence of southerly winds during the period, it seems likely that the flies were wind-borne. It has been suggested that they may be breeding in the London area in some other medium than seaweed, but apart from the entire absence of any evidence of this, two other difficulties would remain : (*a*) how the flies got there in the first place to start this new and unique colony ; (*b*) how they managed to conceal their presence until a big population had been built up, and then appeared simultaneously and in large numbers over a wide area.

Their nearest normal breeding place on the Thames Estuary is Canvey Island, where suitable sites are limited, and numbers of flies not abnormal.

Mr. G. A. Brett showed a series of lantern slides of this insect.

Dr. B. P. Moore and **Mr. B. J. Southgate** exhibited a selection of entomological specimens mounted in plastic (polymethylmethacrylate) blocks. The mounts had been prepared by means of a new cold-casting technique, to be described in detail in a forthcoming issue of the *Museums Journal*.

Dr. J. D. Carthy exhibited specimens of *Satyrus semele azorinus* (Lepidoptera : Satyridae), an endemic Grayling from the island of Pico, Azores, taken in August and September, 1952, during the Queen Mary College Expedition's stay on the island, and illustrated his communication with colour slides of the habitat of the butterfly.

This subspecies was described by Strecker in 1899. Le Cerf (1935) proposed a separate subspecies for each of the Azorean islands of San Miguel and Pico. Rebel (1940) considered the subspecies too variable to warrant this further subdivision, despite the sea barriers which must affect the spread of such a poor flier.

On Pico the butterfly is found in large numbers on pastures at 3,000 ft., being found lower down when the ground is open. Like many island species it is darker and smaller than the Continental form. The white band on the underside of the hind wing of both sexes remains, however, clearly marked and may serve some purpose in attracting individuals into groups, which will constantly be dispersed by the oceanic winds.

Professor O. W. Richards made a communication on commensalism of *Desmometopa* (Diptera : Milichiidae) with predacious insects and spiders.

He said the species of *Desmometopa* (Diptera : Milichiidae) are well known to be facultative commensals of various predacious insects and spiders (Summary—Hennig, 1937, *in* Lindner, *Flieg. pal-Reg.*, **60***a* : 16–17). Biro first observed a Papuan species sitting on the thorax of an Asilid fly. When the host captured prey, the *Desmometopa* licked it. The same observer noted *Desmometopa* in Europe licking honey bees which formed the prey of crab spiders. This observation has often been repeated both with spiders and with Reduviid bugs. In France, during August, 1953, similar observations were made at Montfort, Dordogne.

(1) A specimen of the Reduviid, *Rhinocoris* (= *Harpactor*) *cuspidatus* Rib. ♂ (det. Mr. R. J. Izzard) was observed sucking a worker honey-bee on the flowers of *Origanum*, 8.viii. On the dead bee were 2 ♀ of *Desmometopa sordidum* (Fall.).

(2) A specimen of the same bug was seen on flowers of *Origanum* without prey, 9.viii. On the dorsum of the pronotum a male and female of the same fly were sitting. This is apparently the first record in Europe of the association in the absence of prey.

(3) A very large and conspicuous, orb-wearing spider, *Argiope bruennichi* (Scop.) ♀ (det. Mr. G. H. Locket) was captured in a pill-box together with the centre part of her web, 16.viii. The spider was eating a honey-bee worker. Five or six hours later it was noticed that there were six small flies (*Desmometopa sordidum* ♀♀) still alive in the box with the spider. The flies must have been sitting on the dead bee or on the web (most probably on both). They did not become entangled in the part of the web brought away in the pill-box.

Mr. R. B. Benson showed a photograph and a slide of the froth-balls exuded from mines of larvae of the archaic sawfly *Blasticotoma filiceti* Klug (Blasticotomidae) in the stems of Lady Fern (*Athyrium filix-femina* (L.) Roth.).

He mentioned that this species had been known to occur formerly in the Royal Horticultural Society's Gardens at Wisley, Surrey, and that this year it had been rediscovered in Britain at Goldsitch Moss in North Staffordshire by Mr. James Edwards, and also in Kew Gardens by Mr. A. H. G. Alston (see 1953, *Ent. mon. Mag.* **89** : 304).

Mr. D. Leston made a communication illustrated by mounts, drawings and lantern slides on the value of the tracheation of the wings in the classification of the Hemiptera : Heteroptera.

He said the value of wings in the classification of Heteroptera had previously been under-estimated, perhaps because of the lack of a consistent interpretation of veins and wing-areas. The present work was to some extent based on Tanaka (1926, *Annot. zool. Jap.* **11** : 33–57), the only earlier worker to have fully exploited tracheation in interpretation.

The tracheation is much reduced and no primary branches (Rs, M1, M2, PCu, etc.) are present. Three folds, anterior, vannal (or claval) and jugal, divide the tracheae into groups : (1) ante-anterior, Sc (when present), R and M ; (2) ante-vannal, Cu only ; (3) ante-jugal, 1V, 2V only. The post-jugal area contains only atracheate veins. The anterior fold, in fore wings, is the embolium of some authors ; its presence in hind wings has not previously been noted. The vannal fold is bifid in hind wings but the posterior bifurcation is secondary ; the bifurcation often encloses one or two atracheate veins, the Inter-vannals. C is absent (save perhaps in Reduviidae) from both wings and Sc (save in Reduviidae and related groups) from hind wings. Surprisingly, the modified fore wing (hemelytra) contains a fuller set of tracheae than the membraneous hind wing, suggesting that modifications for flight (not necessarily, however, for speed) are more far-reaching than those concerned with body cover.

Almost all cross-veins are atracheate and the complex courses of some veins make interpretation impossible without examining tracheae. The Reduviid wings suggest an anterior shift by all tracheae and capture by adjacent, pre-formed veins : there is no doubt that, in the phylogeny of the group, tracheation has preceded venation but subsequently the veins have become fixed and tracheation has shown a tendency to wander. No difficulty is found in homologising wings of Heteroptera with those of other groups, but the anterior fold might be a unique feature (against this view, the presence of the anterior fold in both wings gives evidence). No evidence favouring the use of PCu for 1V (1A of authors) is found. It should be noted that veins in Heteroptera are never finely linear as in, e.g., Diptera and Hymenoptera ; this is probably correlated with the less spectacular flight of the suborder. Wing-coupling is homogeneous throughout Heteroptera and markedly different from that of Homoptera-Auchennorhyncha. It would be advisable to abandon clavus as a term and substitute vannus, for such it is. No jugal area is present in fore wings.

Venation confirms groups such as Trichophora, Cimicoidea, Hydrocorisae and Reduvioidea (*sensu* Carayon, i.e., excluding Nabidae and Enicocephalidae). The family Piesmidae is shown to have Trichophora venation, as have the Aradidae ; the Tingidae show similar venational characters in the hind wings to the Reduviidae ; the Enicocephalidae have unique venation ; the Saldidae have no connection with the Gerroidea or Hydrocorisae ; all Gerroidea have a similar hind wing venation ; the Ochteridae and Gelastocoridae clearly have Hydrocorisae venation ; the Corixidae (Sandalorrhyncha) cannot, on venation, be separated from other Hydrocorisae. Further work is in progress.

Mr. T. R. E. Southwood exhibited the eggs of *Chorosoma schillingii* (Schummel) (Schilling) (Coreidae), *Oncopeltus fasciatus* (Dallas) (Lygaeidae), *Dysdercus fasciatus* Signoret (Pyrrhocoridae), *Aneurus laevis* (Fabricius) (Brachyrhynchidae) *Nabis flavomarginatus* Scholtz and *N. limbatus* Dahlbom (Nabidae) and *Capsus ater* (L.) (Miridae). He said that the families of terrestrial Heteroptera could be divided on the characters of their eggs into two main groups ; the first group corresponds with the Trichophora of Tullgren (1918), viz., Pentatomoidea, Coreidae, Piesmidae, Lygaeidae, Pyrrhocoridae and Neididae, with the addition of the Aradoidea ; the second group consists of the Reduviidae, Tingidae and the Cimicoidea. The relationship of the Henicocephalidae and the Cryptostemmatidae cannot be determined until more information on the egg structure is available.

Mr. K. Spencer exhibited the following species of Agromyzidae (Diptera) new to the British List which he had bred from leaf mines during the seasons 1952–3 :

(1) *Melanagromyza beckeri* Hend. mining *Sonchus asper*, Hampstead, vii.1953.

(2) *Agromyza albipennis* Zett. mining *Phragmites communis*, Oxford, x.1952.

(3) *Agromyza johannae* de Meij. mining *Sarothamnus scoparius*, Hampstead, vi.1952.

(4) *Phytomyza adjuncta* Her. mining *Pimpinella saxifraga*, Egham, Surrey, viii.1953.

(5) *Ph. bipunctata* Hend. mining *Echinops bannaticus*, Kew Gardens, vi.1953.

(6) *Ph. conopodii* Her. mining *Conopodium majus*, Hampstead, v.1952.

(7) *Ph. eupatorii* Hend. mining *Eupatorium cannabinum*, Chippenham Fen, vii.1953.

(8) *Ph. heracleana* Her. mining *Heracleum sphondylium*, Porthleven, Cornwall, vi.1952.

(9) *Ph. matricariae* Hend. mining *Matricaria maritima*, Ugley, Herts., vii.1953.

(10) *Ph. silai* Her. mining *Silaum silaus*, Egham, Surrey, viii.1953.

(11) *Ph. tussilaginis* Hend. mining *Petasites hybridus*, Millers Dale, Derby, viii.1953.

(12) *Phytagromyza tremulae* Her. mining *Populus tremula*, Hampstead, vii.1953.

(13) *Liriomyza demeijeri* Her. mining *Artemisia vulgaris*, Hampstead, vii.1953.

(14) *L. sonchi* Her. mining *Sonchus asper*, Pangbourne, Berks., viii.1953.

(15) *Liriomyza* sp. n. mining *Eupatorium cannabinum* at Heddington, Wilts., 1.viii.1953. Imagines emerged several days later.

(16) *Phytomyza* sp. n. mining *Smyrnium olusatrum* at Lisbon, Portugal, 15.iii.1953. One imago emerged, 3.xi.1953.

E. B. BRITTON, *Honorary Secretary.*

The next meeting (Annual Meeting) will be held on 3rd February at 5.30 p.m.

Additions to the Library.

Presented.

Evans, W. H. *A catalogue of the American Hesperiidae indicating the classification and nomenclature adopted in the British Museum (Natural History). Part III. Pyrginae. Section* 2. 8vo. London. 1953. [Trustees of the British Museum.]

Freeman, Paul and De Meillon, Botha. *Simuliidae of the Ethiopian region.* 8vo. London. 1953. [Trustees of the British Museum.]

Lane, J. *Neotropical Culicidae.* Vol. 1. 8vo. São Paulo. 1953. [The Author.]

Ribbands, C. R. *The behaviour and social life of honeybees.* 8vo. London. 1953. [The Author.]

Purchased.

Bestimmungstabellen der europäischen Coleopteren.

4. *Cistelidae, Georyssidae und Thorictidae.* Von E. Reitter. 1881.

5. *Paussidae, Clavigeridae, Pselaphidae und Scymaenidae.* Von E. Reitter. 1881.

103. *Dytiscidae. Hydroporinae* (3. *Teil*). Von A. Zimmerman. 1932.

123. *Lycidae.* Von R. Kleine. 1942. 8vo. Wien und Troppau.

Brandt, Herbert. *Insekten Deutschlands I. Schmetterlinge.* 1. Teil. Sm. 8vo. Heidelberg. 1953.

Calmbach, Victor. *Praktische Anleitung zur Präparation, Fang und Zucht der Microlepidopteren.* 8vo. Stuttgart. 1923.

Evans, J. W. *The injurious insects of the British Commonwealth (except the British Isles, India and Pakistan). With a section on the control of weeds by insects.* 8vo. London. 1952.

Frisch, K. von. *Aus dem Leben der Bienen.* 5th revised edn. Sm. 8vo. Berlin, etc. 1953.

Harvey, L. A., and St. Leger-Gordon, D. *Dartmoor.* 8vo. London. 1953. [*New Naturalist.*]

Horion, A. *Faunistik der mitteleuropäischen Käfer.* Band 3. Malacodermata. *Sternoxia* (*Elateridae bis Throscidae*). [*Ent. Arb. Mus. G. Frey* Sonderband.] 1953.

Pinhey, E. C. G. *Butterflies of Rhodesia. With a short introduction to the insect world.* 8vo. Salisbury, Rhodesia. 1949. [*Look around you Series.*]

Stach, J. *The apterygotan fauna of Poland in relation to the world fauna of this group of insects,*

Family Isotomidae. 1947.
Families Neogastruridae and Brachystomellidae. 1949.
Families Anuridae and Pseudachorutidae. 1949
[*Acta monogr. Mus. Hist. nat. Krakow.*]

Uffeln, Karl. Die sogenannten Kleinschmetterlinge Westfalens. *Abh. Westfalen. prov. Mus. Naturk.* **1** : pp. 98, 1930.

Walsh, G. B., and Rimington, F. C., *eds. The natural history of the Scarborough district. Vol.* 1. *Geology and botany.* 8vo. Scarborough. 1953.

In addition, separates have been presented by Anti-Locust Research Centre ; Dr. F. L. Vanderplank ; Dr. Saadet Ergene ; Forest Research Institute, Dehra Dun ; Smithsonian Institution ; United States Department of Agriculture ; Dr. L. Broadbent ; Mr. G. Williams ; Mr. E. W. Classey ; Mr. H. E. Hammond and Mr. K. G. V. Smith ; Professor H. Weber ; Professor P. A. Buxton, C.M.G., F.R.S. ; Professor Marcel Florkin ; The Director, Zoologisches Museum, Hamberg ; Dr. D. W. Ewer ; American Entomological Society ; Mr. F. J. Griffin ; and Dr. A. da Costa Lima.

NOTICES

In addition to the *Transactions* and *Proceedings* (Series A, B and C), the following publications are available on application at the Society's rooms :—

THE GENERIC NAMES OF BRITISH INSECTS, WITH CHECK LISTS OF THE SPECIES, prepared by the Committee on Generic Nomenclature of the Royal Entomological Society of London, with the assistance of the Department of Entomology of the British Museum (Natural History) :—

Part	1.	Recommendations relating to the publication of the Committee's Reports	Price	6*d*.
,,	2.	Rhopalocera	,,	3*s*. 6*d*.
,,	3.	Odonata	,,	3*s*. 6*d*.
,,	4.	Neuroptera	,,	3*s*. 6*d*.
,,	5.	Hymenoptera Aculeata	,,	15*s*. 0*d*.
,,	6.	Coleoptera Carabidae	,,	10*s*. 0*d*.
,,	7.	Coleoptera Hydradephaga	,,	5*s*. 0*d*.
,,	8.	Hemiptera Heteroptera	,,	39*s*. 0*d*.
,,	9.	Coleoptera Staphylinidae	,,	40*s*. 0*d*.

HANDBOOKS FOR THE IDENTIFICATION OF BRITISH INSECTS.

The Society has undertaken the issue of a series of publications intended to provide illustrated Keys to the whole of the British Insect Fauna so far as this is possible.

It is proposed to cover this field in a series of ten volumes, arranged as follows :—

I. Part 1. General Introduction.
,, 2. Thysanura.
,, 3. Protura.
,, 4. Collembola.*
,, 5. Dermaptera and Orthoptera.†
,, 6. Plecoptera.†
,, 7. Psocoptera.*
,, 8. Anoplura.
Part 9. Ephemeroptera.†
,, 10. Odonata.†
,, 11. Thysanoptera.*
,, 12. Neuroptera.
,, 13. Mecoptera.
,, 14. Trichoptera.
,, 15. Strepsiptera.
,, 16. Siphonaptera.
II. Hemiptera.* III. Lepidoptera. IV and V. Coleoptera.*
VI. Hymenoptera : Symphyta* and Aculeata.*
VII. Hymenoptera : Ichneumonoidea.*
VIII. Hymenoptera : Cynipoidea, Chalcidoidea and Serphoidea.
IX. Diptera : Nematocera† and Brachycera. X. Diptera : Cyclorrhapha.*

The following parts are now available :—

Vol. I, Part 5. Dermaptera and Orthoptera. By W. D. Hincks. Price 3*s*. 6*d*. plus postage.
Vol. I, Part 6. Plecoptera. By D. E. Kimmins. Price 3*s*. 6*d*. plus postage.
Vol. I, Part 9. Ephemeroptera. By D. E. Kimmins. Price 3*s*. 6*d*. plus postage.
Vol. I, Part 10. Odonata. By F. C. Fraser. Price 7*s*. 6*d*. plus postage.
Vol. IV, Part 3. Coleoptera, Hydradephaga. By F. Balfour-Browne. Price 6*s*. plus postage.
Vol. IV, Part 15. Coleoptera, Scolytidae and Platypodidae. By E. A. J. Duffy. Price 3*s*. 6*d*. plus postage.
Vol. V, Part 7. Coleoptera : Coccinellidae and Sphindidae. By R. D. Pope. Price 2*s*. 6*d*. plus postage.
Vol. V, Part 12. Coleoptera : Cerambycidae. By E. A. J. Duffy. Price 3*s*. 6*d*. plus postage.
Vol. VI, Part 2a. Hymenoptera : Symphyta (part). By R. B. Benson. Price 10*s*. 6*d*. plus postage.
Vol. VI, Part 2b. Hymenoptera : Symphyta (contd.). By R. B. Benson. Price 15*s*. 0*d*. plus postage.
Vol. IX, Part 1. Diptera : Introduction and Key to Families. By H. Oldroyd. Price 7*s*. 6*d*. plus postage.
Vol. IX, Part 2. Diptera, Nematocera : Families TIPULIDAE to CHIRONOMIDAE. By R. L. Coe, Paul Freeman and P. F. Mattingly. Price 20*s*. 0*d*. plus postage.
Vol. X, Part 1. Diptera : Syrphidae. By R. L. Coe. Price 17*s*. 6*d*. plus postage.

Parts marked † are on sale or in the press, those marked * in preparation.

Orders for the complete series or for separate parts can be placed with the Registrar at the Society's rooms now, but prices can only be quoted for those parts already issued.

Fellows of the Society may purchase one copy at a discount of 25 per cent. ; additional copies at the full published price.

STYLOPS, a Journal of Taxonomic Entomology.
1932–1935. Vols. 1–4 (all issued). Price £1 16*s*. 0*d*. each ; to Fellows £1 7*s*. 0*d*.

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